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THE
Reformed Kalendar:
OR, AN *Epitome*
ESSAY

TOWARDS
Altering our *Julian Kalendar* to a
nearer Conformity with Truth and our
Christian *Æra*, than hath been yet done
by the *Gregorian* Regulation.

WITH AN
Exemplar thereof fitted for the Year 1704.

Wherein is also considered,
What hath been Urged or Insinuated
against the Attempting any Reformation herein.

Humbly Proposed to the *Consideration* of
our Governors, as well for the more
Regular Accounting of our Time, as
our better Defence against the Cavils
of the *Papal Chair*.

L O N D O N,
Printed for *Sam. Manship*, at the Ship near the
Royal-Exchange in Cornhill. 1701.

THE
Reformed Calendar:
OR,
ESSAY

TOWARDS

Altering our Julian Calendar to a
nearer Conformity with Truth and our
Christian Era, than hath been yet done
by the Gregorian Regulation.

WITH AN

Exemplar thereof, fixed for the Year 1704.

What hath been urged by Infidels
against the Attempting any Reformation herein.

Humbly Proposed to the Consideration of
our Governors, as well for the more
Regular Accounting of our Time, as
our better Defence against the Cavils
of the Papal Chair.

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Printed for Sam. Manship, at the Ship near the
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**THE
PREFACE
TO THE
READER**

I Intend no Boasts here, to allure my Reader to the Perusal of what follows; much less to bespeak his Approbation. If he shall find himself inclined to judge meanly of it, I freely own my self inclined to do so too: And perhaps no one can be a severer Judge upon my slender Performance, than I my self. Could I think I had any Knack in my Pen, I should forestall his Judgment by my own Censures. What I have here to tell him, is, That he will be soon convinced from the following Pages of

The Preface

the Time when they were wrote ; and if he would know why they came no sooner to the Light, among other Reasons not needful here to be mentioned, one I will assure him was, that I did not think any thing I could do worthy of coming to Publick Sight. Nor indeed, had I seen any thing of this Nature from another Hand, should I have yet ventured abroad ; what I have met with relating to this Subject, seeming rather to discourage an Enquiry, than to clear the Difficulties attending it. Some Expressions in the Julian and Gregorian Year, made me hope the Author of it meant to Undertake something of this kind, and, had it been so, this should never have been exposed to the Publick Censure. I am so well satisfied of his Abilities, that I have no room to doubt of his accomplishing something more perfect had he undertaken it ; and I hope he will yet make good what he hath put us in Expectation of, concerning the Allowance of Time for the Equinox's Shifting of a Day in the Julian

to the Reader.

Julian Period. His Approbation of Mr. Lidyat's should have been an irrefragable Rule to me, had I found it to consist with what he grants of the Vernal Æquinox's being on the Twenty fifth of March in our Saviour's Time; which when he considers, I hope he will, if not alter his own Judgment in that particular, yet pardon the Suspension of mine.

I had further dilated upon this Allowance of Mr. Lidyat's, if not recommended it, could I have met with in the Country, where my Residence is, his Book *De Anni Solaris Mensura* which is quoted for it; and indeed my waiting for that from the Bookseller who promised it me, was no small Cause of my keeping these Papers under their Confinement. And if there be any other Omissions, or Disappointments, the Courteous Reader may mee with, imputable to a like Cause, I beg he will Excuse them on the like Score. How ever, as it is, in a plain homely Dress

The Preface

without any Advantage from the always Pleasing, but too often Delusive Charms of Rhetorick, he may find some useful Hints, if not a full Discussion of what on the Subject he may expect: And could my Desires have been gratified, a more satisfactory Account would have been given him from abler Hands.

If the word Retrocession, I use to express the Equinox's Variation by, seem not so proper as Precession, the Term used for it by others, I would have it considered, that as they refer it chiefly to its coming earlier in Time, so I do to its Removal of its Place backward in the Kalendar. My meaning by it is of the same thing, though taken in a different Respect; and so long as it is thus Animadverted, I hope it will prove the Occasion of no great Disrelish. There will appear, its feared, to the Curious greater Causes of Dislike; of which, although I am not Conscious, yet being Fearful, I must entreat the Reader's Favour,

to the Reader.

*Favour, if I conceal my Name, so that
when I find my Censure will be hard, I
may blush behind the Curtain with the less
Concern: But I desire every thing may be
well weighed, before it be Condemned.*

ESSAY

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to the Reader.

Forasmuch as I conceal my Name, so that
where I find my Conscience will be hard, I
may blush behind the Curtain with the less
Concern: But I desire every thing may be
well weighed, before it be Condemned.

And thus I leave it to the
Reader's Judgment, whether
I have not said enough to
justify my self.

If the next Retraction, I will
prove the Equivocal Notion, by
showing that it is not the same
as the former.

And thus I leave it to the
Reader's Judgment, whether
I have not said enough to
justify my self.

THE
hope it will prove the
Difference. There will appear, as far
as the Curious greater Cause of
Dispute, although I am not Convinced
being so far, I must leave the Reader
to his own Judgment.

Thus I leave it to the
Reader's Judgment, whether
I have not said enough to
justify my self.

THE
Reformed Kalendar:

OR, AN
ESSAY
TOWARDS

Altering our *Julian Kalender*, &c.

IT was last Year when first I entertained some Thoughts of an Essay of this Nature ; but soon after receiving notice of a Book's coming out, Intituled, *The Julian and Gregorian Year* ; and imagining it not unlikely but some others of the like nature might soon follow it, I was in hopes my Labour had been superceded by more able Workmen ; so that I willingly took my *Quietus*, and sate down in Expectation of what would be done, either to my Conviction, or other Satisfaction. After some stay for the sight hereof, and many Avocations from these to other Thoughts, the Year wore off, and with it my Intention of going on with what I had begun, got out of my Mind ; until, at length, through some means I had before used, there was obtained for me the afore said Book, and also the perusal of some Letters,

ters, wrote by the Great and Learned Mathematician *Dr. Wallis*, to the Arch-Bishop of *Canterbury*, and the late Bishop of *Worcester*, in Answer to some sent him from those Reverend Prelates. It was some Satisfaction to me, to find from those two Learned Pens a Concession of that, which was the main Foundation whereupon my Essay was to stand, viz. the Erroneousness of both the *Julian* and *Gregorian* Accounts; and likewise, that the Vernal Æquinox was in our Saviour's time on or near the

* *Jul & Greg.* 25th of *March*, * one of them acknowledging it to be yet there even in the Year when he was Crucified.

The Arguments they use against altering the Old Stile are levell'd chiefly against the exchanging it for that of *Rome*, and where any thing is said with an appearance as if they designed to hinder the Correcting at all what they have granted to be Erroneous, it was through an apprehension, one may suspect, of some very weighty Difficulties in the Attempt; which will be found upon a nearer inspection, and which their great Abilities could not have miss'd seeing to be but small, had they given themselves leave more closely to attend them. In the Close of his Book, the last mention'd Author seems not utterly averse to a Change, provided it may be but more correctly done than that of *Rome*. Wherefore if my mean Pen may in this Paper drop any hints, whereby the Feasibleness and safe Practicability of accomplishing an agreeable Reformation, or Change for the better, may appear, and which they or others shall improve to a greater Perfection, I shall think it to have been well employ'd; if it prove otherwise, I shall satisfy myself with my well meant endeavour, and hope that will pass for an Apology with all Reasonable Men.

To Answer any Objections here, will not be so proper, as to do it after I have first given my Reader a View of what it is: those Objections are to contend with: But some things that have been insinuated seeming obliquely to cross my first entrance, to remove them will help to clear the way to what I am Prosecuting. The Advice of the Wise-man, not to remove the Ancient * Prov. 22:28. * *Landmark*, seems to me no Reasonable Obstacle; for although I may not remove it when it stands Right, and in its first place, yet when through Time or Chance it hath slid from its first Station, it can surely be no fault to rectify, and set it straight again. To reduce it to its Ancient Posture, is really to preserve it from being Removed, and so a fulfilling rather than a Contravention of that Precept. As little am I hinder'd by that part of the Nicene Councils *6th*. Canon, *ne quicquam in regimine*, keep the Ancient Customs, let them be held fast and preserved; for how they can be kept or preserved, when through whatever Accident they have been once altered, otherwise than by a Return, or Reduction of them to their Pristine state I cannot discern. Or were it otherwise, when through a further Experience, and a more improved Knowledge, an Error in any Old Custom is plainly discovered, it may charitably enough be presumed, the Holy Fathers of that Council themselves would not, when they had seen it, been backward to have had it mended. To think otherwise, would to some administer occasion to believe Churchmen fond of any Mistake, that can but plead for it self Antiquity; and how far this might be improved by Persons evilly inclined, I wish Wise Men to consider. But,

That every Deviation from, or Alteration in our present *Julian* Stile, would be an Opposition to, or breach

breach of any Decree made by that Council, is not, I must own, to me very manifest. If they appointed that *Easter* should be observed the first Sunday following the first Change of the Moon after the Vernal *Aequinox*, does this hinder our altering the *Julian Kalendar* whenever we find it to Err; or that we may not Reduce it to what it was in respect of that *Aequinox* at the time of our Lords Incarnation? Yea, does this forbid our Establishing a New *Kalendar*, when occasion shall appear for it, wherein the *Aequinox* may be kept more Regularly to a Constant place, and a nearer Conformity shall be made to our Christian Computation? This Council intended no Establishment of the Present Account, that not becoming the general Christian *Ara* until the Time of *Dionysius Exiguus*. All they seem'd to aim at, was so to appoint the Paschal Solemnity, as that it should not be kept before the *Aequinox*, as the *Quarto Decimans* and some Judaizing Christians did according to their Methods sometimes keep it. And this was ordered by the *Phases* of the Moon, because succeeding the Jewish Passover they were all of them in those Dayes influenced more or less by the Jewish Rules in the finding of it: Only it was their great Care, in regard it was thought the *Jews* had corrupted the Ancient methods in keeping it before, to put off its Observation until after the *Aequinox*, and to secure it to be then on the right Day of the Week whereon our Lord did arise. So long then as our appointment of *Easter* does nothing that may hinder this, we do not, so far as I can see, at all thwart the Design of that Council, or do any thing that may render us obnoxious to its Sanctions. On the contrary, their Design being no other than as is mentioned, it would not be without Reason if we presumed, that, had it then come into their Minds, another Rule for this purpose would

would have been Established, less clog'd with difficulties and perplexity, and that would have been far more agreeable to the Solar Reckoning in the Christian Church now Generally used; which in the following Pages I shall explain.

Wherefore, seeing the Intention of the Lawgivers, so far as that may reasonably be discovered, either by the main End and Scope they are driving at, or any other way, is principally in every Law to be respected and relied on; since the Intention of this Council seem'd principally to aim only at keeping this Festival after the Æquinox, but as close to it as the Rule derived to them from the Jews (than which at that time they thought of no other) would bring it; since there is no Constitution in this, nor in any other Council to which we are Subject, for ought yet appears, that hath so Establish'd the Julian Kalendar, as that it may not be Lawful for a sufficient Authority to make any Deflexion from it: since too, had it been otherwise, the Decisions of no General Council, whatever deference we pay them, is held by our Church * to be Infallible even in matters of Faith, much less in other * Art. 21. things; nor are there any outward Rites or * Observations, but what by due * Pref. to the Com. Pr. Authority may be altered, and are alterable according to Time and Place, we Book. Art. 34. find nothing yet that may divert us from the Proposals we are to make. Setting aside then what further might be alledged in relation to the aforesaid Council; as that all its appointments in respect to this affair are not now Practicable (for instance, the notice we were to expect from the Bishop of Alexandria of the time when we were to keep this Feast;) that it is not so clear at this Day, as it might be wish'd, what Rules that Assembly did pre-

prescribe in this matter, as to many particulars relating to it, &c; allowing what may reasonably be demanded, I think enough hath been said to free us from the Dread of that Council, and so here I take leave of it to proceed.

As to what other Objections, or Insinuations, there be material to be considered I shall weigh them in their more proper places, if I chance not to obviate them before; and therefore my Entrance thus cleared, I shall attempt now what I have undertaken. In order whereto, I should in the next place state, or give some short account both of the *Julian* and *Gregorian* Kalendars; after which I shall shew, what that is I would have them Reduced to in this designed Regulation. As to the Two former, besides that they are pretty well known to every body, my labour is happily prevented by the Ingenious, Learned and clear Account giving of them by the Author of the *Julian* and *Gregorian* Year; to whom therefore I shall refer my Reader, where also he will sufficiently be convinced of their Defects and Faultiness. But to Recapitulate in short what is to be minded herein, we must remember that our Account of Time being Solar, forasmuch as the Sun is justly taken for the best Divider of Time as well as Distinguisher of Seasons, the Periodical Revolution of that Planet, i. e. Its Return after its Passage through the Ecliptick to the same point again, is and hath been taken for that Portion or Measure of Time, which is called a Year in these Western Parts, as well as in many other Places of the World, ever since before our Saviour's Incarnation. The number of Days assigned for this Annual Revolution, or Yearly passage of the Sun thorough the Ecliptick, hath by divers People been diversly reckoned; but was by *Julius Caesar*, or rather

rather his Assistants, in the Composing of that Kalendar, which now bears his Name altho' made by some Egyptians, computed to be 365 and 6 Complete Hours. The odd Hours, not so well otherwise to be comprised, were reserved to the End of Four Years, when they made one whole Day to be added to the other 365, so that every Fourth Year should contain 366 Days; and this method in that Account was to be continued for Ever. But this, after a long Experience, and a more enlarged and accurate knowledge in Astronomy, hath been demonstrated to have been too large an Allowance for the Suns completing his Yearly Circuit, where-by it hath come to pass, that the Days in that Kalendar have not kept their First Stations, in respect to that Planets Return to the same Points in the Ecliptick, where it was on those Days before, and consequently that the Years have not been rightly measured, but that, for instance, whereas the Twenty Fifth of March is this Year reckoned by that Account to be but 1700 Years since the Incarnation of our Saviour, it is in reality 1700 Years and about 16 Days, as by and by I shall shew.

Pope Gregory the Thirteenth being made sensible of this Error in that Computation, set himself to Devise a Regulation thereof, and by the help of Christ. Clavius, Aloysius Lily and others, composed a New Kalendar; which is now called the Gregorian or Roman Account. Wherein, having found that the Days had shifted from the Stations they had at the Time of the First Nicene Council in respect of the Suns Place in the Ecliptick, he contented himself to bring them to those former Stations, and so Reduced the Kalendar and the Days in it to the posture they had at the time

of

of that Council. And the better to prevent their Deviation, or running into the like Error for the future, he appointed that the Intercalar or Additional Day, which was to be inserted every Fourth Year for taking in the odd Hours of the Sun's measuring his Circuit, should be Omitted thrice in every 400 Years. By which Regulation, it is plain, he went not to the source of our Christian *Era*, which he ought to have done when he pretended to give a true Christian *Kalendar*; nor hath he given it a true Beginning and Ending, or allowed a Right Proportion for adjusting the former Error, as presently I shall shew. For which cause it is still requisite that a further Reformation should be made: And on a Method for this I design now to proceed, which I shall endeavour to render so Full and Complete, as to leave as few Faults as possible hereafter to be complained of.

Error being thus discovered in both the former Accounts, the one reckoning the Time Elapsed since our Lord's Incarnation too little by about Sixteen Days, and the other about Five, reckoning the Number of Years as generally is allow'd, (the Dispute about which it is not my Business here to be concerned with) for a just and thorough Reformation, and to obtain an Account that shall be more Correct and Complete, it will be requisite, First to assign the *Kalendar* a right Beginning and Ending, agreeing with the Christian *Epocha*; then to place the Memorable Days in their true and proper Stations; after this to shew how this Reformation will best and most easily be effected; next, for removing the Difficulties imagined to be in such an Attempt, to set forth at large a *Kalendar* so Reformed; and Lastly, to enquire after a truer Proportion of Time to be allowed for the Omission of a Day,

Day, whereby to keep our Account always true when it is once made so.

First. The Beginning of our *Kalendar* should in the First Place be set right; and altho' it hath not yet, so far as I know, been so much found fault with as some other particulars, it stands in need of a Reformation perhaps more than any. A Complete Christian *Kalendar*, one would expect, should give us an Account of a Complete Christian Year, whereas that we use doth in truth give us an Account of none, but is a strange mixture of a part of one with the part of another; beginning with the last Quarter of the one, and Ending with the Third Quarter of the other. How shall we Excuse it from being a manifest Absurdity, that our Supputation should begin from our Lady Day, and our *Kalendar* from the First of *January*; that all the time between, should this Year be inserted in the one for part of 1700, and in the other be Accounted, as it is in truth, belonging to 1699; that an alias must needlessly be foisted in our Dates during this Amphibious Interval (as *March* 1, 1⁶⁹⁹/₂) to make our selves understood; and that at the latter End we must cut off our Year, when it is not above Three Quarters past? Our Annual Almanacks or Yearly *Kalendar*s, which are Published as *Ephemerides* for this or that Year, do in particular belong to neither this nor that, but are each odly made out of the Fragments of both; wherein the Beginning must be distinguished with a doubtful Date, and, for amends, the latter end pared off to confound another Year: They are, in short, an odd jumble of Days, which, if they may be called a Year, ought not, I am sure, be called a Christian one, unless we will chuse a new *Epocha*. Did we indeed reckon our

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Years

Years from our Lords Circumcision, they would so far be right, and it would be no Solœcism to call that our *New Years Day*. A Stranger that is not otherwise acquainted, must needs upon sight judge this to be our real *Epocha*, and would be at a loss what to make of our Doubtful Dates, or know how to reckon the Amphibious time; which I am apt to suspect many poor Ignorant Creatures amongst our selves scarce do. I well remember a warm Dispute I once heard between a Landlord and his Tenant; the latter not being able to comprehend, why the Receipt he would have for what he paid at *Candlemas*, should not Dated by the Year in which he found it in his Almanack, rather than that before, to which it really did belong: and the likelihood of others being lead into such Mistakes hereby, none will doubt of who are truly sensible of the Ignorance of some unthinking People. And why should this snare be left for any? were any great Convenience or Necessity pressing for it, 'twould be tolerable; if not, as I see none, this Principally ought to be Rectified.

For the doing which we must consider what is the source from whence we do derive our Christian Account, and, having found in what part of the Ecliptick the Sun was when that happen'd which makes our *Epocha*, cause our *Kalendar* to Begin the Measure of his Yearly Circuit on the Day when the Sun comes to that place, and to End when it Returns to that Place again. The Christian's *Epocha* is the Time when Jesus Christ, whom we own for our Lord and Saviour, did vouchsafe First to come into Humane Flesh; which is the Day of his Incarnation, that we Commemorate by the Name of the *Annunciation of the Blessed Virgin*. This is, and hath been generally own'd to have happen'd on the 25th of *March*, or the

the 8th of the *Kalends* of *April* as it was then reckoned in the *Julian Kalendar*; On which Day, according to the most received Opinion, the Sun was that Year in the Vernal *Equinox*, or on that Point of the *Ecliptick* which intersects the *Aequator* in its approach to our *Northern Hemisphere*. At the Sun's Arrival to this place then should our *Kalendar* begin, and not as it does now at his coming to 21 Degrees odd Minutes in *Capricorn*; nor, where our present Supputation begins, at the 25th of *March*, from whence the *Equinox* hath receded since our Saviour's time, through the over-proportion of the *Bissextil* in the *Julian Period*, 16 dayes backward, *i. e.* to the 9th. of that Month, where this present Year it is found, and not on the 10th. as by looking on the Sun's place in the Monthly Columns of some of our *Almanacks* some may too hastily deem. Last Year indeed it was in the Morning of the 10th. by reason of almost 18 Hours advance it had made in the Three Years, which were then past from the foregoing *Bissextil*; but if we would find how far it hath come back from the Day whereon it was at our Saviour's Incarnation, we ought only to consider on what Day it is in a *Bissextil* Year, as this is, since according to the Computation we use that was a *Bissextil* wherein our Lord was Incarnated. In the *Ephemerides* for this Year, such as Calculate from the *British Tables* place the Sun's entrance into *Aries* before Noon on the 9th. as Mr. *Gadbury* gives it that Day at Noon an advance there of 2 Seconds, and Mr. *Coley* of 1 Minute. Mr. *Parker*, and such as Calculate from the *Caroline Tables* place not the Sun in *Aries* until the 10th this Year; but it hath then, according to them, an advance of 53 Minutes in that Sign, which, allowing it to get at that time, as it really doth, 59 Minutes and about a half in a whole Day, will bring you to

look for its Entrance about Two Hours and a half after Noon the Day before. From which Tables its Place is most truly Calculated it is not needful I should here enquire : they both agree the *Æquinox* to be on the Ninth, and not far from Noon, which is enough for our present purpose. Well then ; the Vernal *Æquinox* having been held to happen on the same Day with our Lords Incarnation, and the Day which we now celebrate for the Commemoration of that great Blessing, being found to have removed to Sixteen Days distance from that Solar Ingress, or the Suns Return to the Place where it was then, it will be necessary, if we will bring our Computation Regularly from that Time, by equal and exact Revolutions of the Sun, as in a Solar reckoning we ought to do, to Reduce that Feast, common called *the Feast of the Annunciation*, to the Day in which the Sun makes this Return ; and from thence to Begin our Year, and to frame our Christian *Kalendar* accordingly. Without this I cannot see, how we can well call our Account either Christian, or True ; for it is not Christian if it Begin not with the Christian *Epocha*, nor true if that be not brought to the true Time. When this is done, the Measure of our Years will be by the Sun's complete and entire Revolutions ; these commencing from the most Remarkable Point in all the Ecliptick, upon other respects besides the main one before mentioned, will give our *Ara* an appearance of the most Perfect of any used ; and our Annual *Kalendars* will at last handsomely consist with that, which is both to our Church and State the Common Supputation, without Ambiguity, Confusion, or Absurdity.

2. When the Beginning of our *Kalendar* is put Right, and the Days and Months after be put to follow according to their due Succession, what we are

to do next will be the easier accomplished, which is, to place the Memorable Days in their true and proper Stations. I grant it to be not absolutely necessary, that our Commemoration of a Blessing should be always Solemnized exactly on the true Day, answering that whereon the Blessing was bestowed: if our Devotion be true and unfeigned, our Thanksgiving Heartly and Sincere, we'll not suspect our Acceptance for a Mistake in the Chronology. But 'twill be more agreeable I think, and bear a better Decorum, if our Time be true as well as our Devotion, and we can Believingly say, *Almighty God, who hast given us thy only Begotten Son to take our Nature upon him, and as at this Time to be Born &c.* in the Collect for our Commemoration of that Blessing; and to do otherwise may seem to some to be not so serious as we should be. Now,

Of these Days some are Fixt and others Moveable. The Fixt are either such, as being from Ancient appointment, refer for the most part to what belongs to the First Age; or else such as are of a later Date, and relate to what hath been done of later Years.

Among the First our Principal regard is to be had to that, which Begins our Establish'd Computation; this especially will need the greatest Rectitude, as being that on the Truth whereof stands or falls all the Truth of our Chronology: But in relation hereto I have said enough before. And there is no reason, why the rest of the Immoveable Feasts should not follow according to their Original Designation and Appointment, and be made to keep the same Distances from it, which they had in regard to their respective Occasions at First allotted them. There be some indeed whose Occasions seem Indifferent to any time, as that of St. *Michael* the Arch-Angel, and *All-Saints*; but for that reason, and since their pre-

sent Distances are from Ancient appointment, it will be best to let them keep the same Distances still. The rest, as they are Commemorations of Persons living, and Actions done, whose particular Times were Pointed out by those of the Primitive Ages, that better knew them than we at this Distance can be presumed to do, have all the reason in the World to be restored to their First designed Stations; which is done by reducing them all equally together in the same proportion with the First, that is, Sixteen Days.

But for those of a later Date, as they are but few which are celebrated in our Church, so they do commemorate what hath happen'd within a less compass of time than can be allowed for the shifting or alteration of a Day; for which cause they are not to be removed, but kept on those Days in the New, which shall exactly agree with and answer to those Days whereon they were to be Observed in the Old *Kalendar*. Unless it be thought meet to give the *Powder Plot* a Reduction of one Day; forasmuch as the *Equinox* being now on the Ninth about the middle of the Day Natural, it must have been when that *Plot* was hatcht, *i. e.* almost a Century ago, in the Morning of the Tenth, so that the greatest part of a Day is since then Retroceded, and consequently what was then the Fifth of *November* is contained for the most part in that which is now the Fourth; and this is the rather proposed, because, altho' the Conspiracy was designed to have been Executed *November Fifth*, the Discovery and Prevention of it, for which we give Thanks, was made the Night before, and is therefore now certainly fallen back into the Fourth. I have for these Reasons placed the Commemoration of it on the Day which answers to the Fourth in the following *Kalendar*; but whether it shall there stand,

is left with all the rest to the Determination of those to whom it shall belong.

There hath appeared hitherto little Difficulty about the Festivals; but the greatest hath ever been concerning those which are Moveable. Especially about *Easter*, the *Index* or *Gnomon* to point out all the rest, there have been great Controversies formerly in the Church; and the Tables for finding it are yet too much perplex'd. But I must own there is no sufficient cause very Visible to me, why all this Pother should be made concerning it. It's true, so long as we take the Moon for our Guide to it, Perplexity and Uncertainty will ensue; But does it not favour somewhat of the Unleavened *Few*, whose Account was governed by the Moon, to Dance attendance for it after the Phases of that inconstant Planet? If in all the other Parts of our *Kalendar* the Sun be our Guide, why should it not, so far as it may be, in this too? In the Primitive times, and when the First Council of *Nice* State, which gave us Rules for finding this Feast, that we now follow was not yet made the Establish'd Account of the Church, which consisting partly of *Jewish* Converts, and partly of Gentiles from several Nations, they were still wavering, some leaning to one Account, some to another, some reckoning from the *Jewish*, some from the *Julian*, some from the *Olympiades* &c; no one settled Account was fix'd for a Standard, no one Common Christian *Era* was established, but everyone followed that which himself best liked. And when it was thus, it could be no wonder that Differences should arise; or that, when the Time for a Feast was to be Determined, which came in Succession from another principally known only to the *Jews*, the *Jewish* way of reckoning for it by the Phases of the Moon should have some Influence in Ending of the Dispute, Altho'

had there then occur'd to their thoughts who were concerned any other way, whereby they might have wholly avoided the *Jewish* Rules in finding the time for celebrating this Feast, their aversion to them then seemed to be such, as would have induced them to Resolve upon that Way. For the Second thing they

Dr. Cave's
Life of Athanasius.
Sect. 3. §. 10.

concluded upon in this Controversie was the Unfitness of following them, who had been the Authors of our Lord's Death in that Solemnity wherein was Commemorated his Resurrection. So

that had those Fathers been now living, and in the present Solar way of accounting to have decided that matter, I should scarce doubt but they would have taken another Method, and made another Rule. Their main care then was, to make this Feast follow as close as might be in the then Lunar reckoning after the Vernal *Equinox*, and (in opposition to the Judaizing Quarto Decimans) to fall out always on a *Sunday*: And if it be my care, as it is chiefly, to keep it the nearest I can to that time in the now universal Christian way of Accounting by the Sun, I hope I shall not be harshly deem'd therefore to be fond of Novelty, or too much to derogate from the Mind of that Venerable Assembly, especially when my care of keeping it on a *Sunday* shall be likewise the same. My proposal for this purpose is, that the First *Fryday* after the Vernal *Equinox*, according to the Sun's true Revolution, without any regard to the Moon, *i. e.* the First *Fryday* after *New-Years Day* be *Good-Fryday*, and the *Sunday* following *Easter-Day*. By which, as the Main Intent of those Fathers, who meant to Oppose the *Jews* rather than Establish any Conformity with them, will be Entirely kept, so the perplexity of the Paschal Tables, Epact, Golden Number, and indeed of any Tables for this purpose will

will be utterly avoided, and scarce a Peasant but, in the *Kalendar* I am going to give a Specimen of, will be able to foretel it. Hereby the *Sun*, which distinguishes our Days and Nights, Summer and Winter, Spring and Fall; whose Return renews our Seasons, revives the Product of Nature, and supplies us with the Returns of all things (under God their first Cause) in their expected Times; but whose Deser-tion leaves us in Cold, Barrenness and Darknes: This Planet, I say, which makes all these remarkable and useful Distinctions, will then be the sole Governour of our Account, make it all uniform and of a piece, bring it to a constant tenour in all its Parts, and recover us from the bewilder'd wanderings after his fickle Sister.

That lesser of the two great Lights might com-port well enough with the dusky Twilight of the Jew-ish Dispensation; but the more glorious Lamp hath a better Congruity with the Meridian Brightness of the great Illumination of the Gospel. God might well permit the borrowed and reflected Light to lead them to the Type, whilst he allows us the Original which hath Light in it self for a Guide to the Anti-type; if the *Moon* served to bring to their Remem-brance the Slaying of the Paschal Lamb, to secure their Lives from the destroying Angel, the Sun will with more Truth direct us to the Time for remem-bering the Death of the true Lamb, who was to come into the World, by his Death, to expiate our Sins, and to save our Souls. Some may be tempted to think it not without a particular Providence, that that memorable Blessing should be conferr'd on the *Jews*, at the most visibly remarkable part of Time in their Account, the *Full Moon*, which is the Fourteenth Day of their Lunar Month, and that this greater Blessing

Exod. 12.

bestowed

bestowed on all Mankind by the Death and Resurrection of our Lord, should fall out at the *Sun's* vernal Ingress into the *Æquinoctial*, the most eminently remarkable Portion of Time in our solar Account, that both the one and the other may, with the greater Ease and Exactness, be commemorated in each Account, by means of such notable Guides and Directions. But they groped in the dark, while we have the Light to lead us; would be but follow it, we need no longer stumble after them in the Night, our Directions being now wrote with the *Sun's* Beam. This will serve, as the best Clue, to lead us out of the Labyrinth of uncertain Tables, to the true

V. Dion. Petav. Animadv. in Epiph. ad Her. 91. Alog. p. 175. Edit. Col.

Revolutional Day of our Lord's Resurrection; which the general Current of the most Ancient Writers carries to the very Day of the Vernal *Æquinox*. And our Thanksgiving for it will be paid as near to that time, as, without altering the Days of the Week, is possible; whereas before it was oftentimes at more than a Month's distance. In short, the Usefulness and Fitness of this Regulation will appear more to every one, the more he reflects upon it: But I am only to propose, and shall leave it to better Heads to determine.

This Festival being thus placed, the rest that are moveable will of themselves fall into their proper Stations, according to the usual Rules; which as they need no Alteration, so neither is it requisite I should stay here to explain them, and so,

Thirdly, What is to be done for the Reformation of our *Kalendar* having been shewed, our next Consideration shall be, How or in what manner this would best, most easily, and practicably be done; whether

whether all at once, or by degrees. To reduce the Day of the *Equinox* to be the first of the Month, and of our Year (as I have shewed it ought to be) will be the easiest performed by degrees, with the least Confusion and Disturbance in the *Kalendar*. For instance, Should it be appointed that every *February* (or last Month) should each Year have Thirty Days, and in Leap Year Thirty one, until all were Regulated, in Four Years time it would be with all the facility could be imagined accomplished. For the *Equinox* being now *March* the Ninth, by taking two Days from the beginning of that Month, and adding them to that before four times over, there will be by that means Eight Days cut off from *March*, and taken up in the latter end of these Four Years, each containing Two Days apiece more than ordinary, and so the Ninth become the First of that which is henceforward to be our first Month, and beginning of our *Kalendar*. But then it will not be so easie to draw back the Festivals into their true and proper Places, so as to keep pace with the other, and jump in all right at the same time. For the *Equinox* this way wants but Eight Days, and they Sixteen to be reduced; and besides, as that goes back, these of consequence will be advanced, as when upon the first Reduction what is now the first Day was before the third, by consequence what is now the Twenty-fifth (or the Feast of the *Annunciation*) will be what was before the Twenty-seventh. Wherefore to make them come back, so as all should fall right in their Places together, it would be necessary, as we bring back the *Equinox* two Days, we should reduce the Festivals Six, by which means all would be made streight and even at the Four Years end; unless those of a later Date, which must have another Reduction. But to give an exact one to all,
being

being Difficult and Perplexing this way, it would do much better to put them at once in their Places, after which there will need no more to do, than to give them an Equal pace backwards with the Day of the *Aequinox* in its Yearly Reduction. The Moveable Feasts may be also Rectified all at First, since they being yet tied to none, may as well now at First, as after by Degrees be Reduced, and, as much as their Nature will allow of, fixt to their proper and intended Stations, the First *Fryday*, or the First *Sunday* after the Vernal *Aequinox* will be in it self the same, whether the *Aequinox* happen on the First or the Ninth Day. Thus would the whole *Kalendar*, without playing *Hocus-pocus* with any part of it, making Chasms, or abrupt breaking off, be entirely and easily Reformed.

But if, altho' this appear facile and feasible in Relation to our own Account, some may yet think it will prolong, and every Year whilst it's a doing renew our Confusion in Relation to the Stile of our Neighbours, and that, if there must be *Annus Confusionis*, or a perplext time on't, it's better be One Year than Four. To satisfie these we will now see how the Matter will stand, when the whole Reformation is made and completed all at once. For this purpose it will be requisite to leave off the Old *Kalendar* at the Eighth of *March*, and then to make the Day, which should have been the Ninth of that, to be the First of the First Month in the New Year. Wherein all the Old Fixt Festivals must be reduced each of them Sixteen Days, by putting, for Instance, the *Annunciation of the Blessed Virgin*, which was before on the Twenty Fifth of *March*, on that Day which answers the Ninth, and will be, the Eight Days being cut off, the First of the Month answering thereto; and the Feast of *St. Michael*, which was on the Twenty Ninth of *September*,

ber, on that which answers the Thirteenth of that, and will be, Eight Days being taken off, the Fifth of the New Month succeeding it. The later Holy Days are to be kept to the Times they are at, only, in respect of the New Months beginning at the Ninth of the Old, with an appearance of Eight Days sooner; except the *Powder Plot*, which, as before is hinted, may be placed a Day earlier. The moveable Feasts are to be placed as was prescribed before. In this way all will presently be done; and if the Confusion by the sudden Alteration seem greater, it will be the sooner over, and no after-puzzlings expected another Year.

But when every Month is either way made thus different from what it was, by what Names shall we call them? Shall we continue the Old, or give them New ones? It cannot be denied but the Old ones will best be known, but they, in my Opinion, would occasion, especially to Strangers, the greater Confusion. When a Stranger finds an Action dated by one Man *March* the First, by another *March* the Ninth, and by a third *March* the Twentieth, it will put him to no small perplexity to reconcile the seeming Contradictions; finding the same Month named, but in appearance three several Days, and not seeing Cause to suspect three several Months under the same Name, he will be apt presently to conclude two of the Dates to be false, and that only one can be true, and which that one is he racks his Brains to discover. But when a Thing is dated upon several Days of differently named Months, it appears at first sight that the different Dates arise from different Stiles, and that in their several ways of accounting all may be true. For which cause, and by reason the Months will be in this way really different from what they were, having neither Beginning, Ending, nor any remarkable

remarkable part alike, and for that the Old Names are many of them confessedly derived from Heathenish Deities, Customs, or Persons (a Badge we still wear of the old *Roman* Livery) I judge it would be much more agreeable to our Christian *Era*, and less liable to occasion in Strangers any Confusion, if New ones were appointed. And in this respect the Alteration of our *Kalendar* would be best done all at once; for the Change of the Names would not be brought in so easily by degrees: It would be hard to say which Year the Change ought be appropriated to, and to divide the Alteration between several, would be both perplex'd and absurd. What Names will be fittest for this purpose, I shall leave to others to determine, proposing only for Trial sake, and for the Use of the ensuing *Kalendar* these that follow, viz.

1. *Primen.* *Primus Mensis*, The First Month.
2. *Imbrif.* *Imbrifer*, Showry Month.
3. *Florēmen.* *Florum Mensis*, A Month of Flowers.
4. *Alsol.* *Alto Sole*, the Sun being then at its utmost Heighth.
5. *Quintil.* *Quintilis*, The old *Roman* Name denoting the Fifth Month.
6. *Frumen.* *Frugum Mensis*, Harvest Month.
7. *Aquades.* *Aqualis Dies*, The Day and Night being then equal.
8. *Vinimen.* *Vini Mensis*, Vintage Month.
9. *Advent.* *Advent Month*, being that before *Christmas*.
10. *Natale.* *Mensis Natalis*, beginning with our Lord's Nativity.
11. *Undemen.* *Undecimus Mensis*, The Eleventh Month.
12. *Mennlt.* *Mensis Ultimus*, The last Month.

With

With these at the top of every Month shall be placed the Old Names, to shew which of the Old Months do chiefly correspond with, and are for the most part contained in each of the New.

There will be some further Alterations on some particular Accounts required; in consequence from the alteration of the Days forementioned; as of the Law, and University Terms, Ember Weeks, &c. The Law Terms, and their remarkable Days of distinction, so far as I understand them, I conceive may be as, with submission to those who are better acquainted with them, is shew'd by the following Table, in regard to *Hilary* and *Michaelmas* Terms; for *Easter* and *Trinity* Terms may in all respects observe the same Rules as before. Note, the first two Columns shew how they are now, and the other how they may be with regard to the new Months.

	As now		may be
Hilary	Begins Jan. 23.	Octab. Hil.	Beg. Natal. 31.
		Quind. Hil.	Quind. Epiph.
		Craft. Purif.	Tres Epiph.
	Ends Feb. 13.	Octab. Purif.	Octab. Hil.
Michaelmas			Quind. Hil.
	Begins Oct. 23.	Tres Mich.	Beg. Equad. 16.
		Mens. Mich.	Octab. Mich.
		Craft. Anim.	Quind. Mich.
		Craft. Mart.	Tres Mich.
		Octab. Mart.	Mens. Mich.
	Ends Nov. 28.	Quind. Mart.	Craft. Anim.
			Octab. Anim.
		Ends Vinim. 22	

By this Change they will have the same Distances one from another, about the same Length, and will as little interfere with any solemn Times, with which they have any Inconsistence, as before. But these, and the following Changes, I refer to be consulted

sulted of by those, who are more peculiarly concerned in them. Especially in regard to some things belonging to the Reverend Clergy, wherein their Rules ought to prescribe to us; as Proper Lessons for each Day, and what else belongs peculiarly to the Ecclesiastical *Kalendar*. Only, in reference to what may usefully be inserted in our Yearly Almanacks, I shall observe, that the University Terms and Ember Weeks may be changed according to these Tables,

viz.

	Univ. Terms are	may be
1.	Begins <i>Octob.</i> 10. Ends <i>Decem.</i> 17.	Equades 13. Advent 23.
2.	Begins <i>Jan.</i> 14. Ends <i>Eve Palm S.</i>	Natale 21. As before.
3.	Beg. 10 d. after <i>E.</i> En. <i>Thursf.</i> bef. <i>P.</i>	As before.
4.	Beg. <i>Wed.</i> aft. <i>Tri.</i> Ends about middle of <i>July.</i>	As before About 21. of <i>Alsol.</i>

Ember Days are *Wednesday* and *Friday* following,

	Now	May be
1.	1 Sunday in <i>Lent.</i>	As before.
2.	<i>Pentecost.</i>	As before.
3.	<i>Septemb.</i> 14.	<i>Frum.</i> 28.
4.	<i>Decemb.</i> 17.	<i>Advent</i> 23.

Advent Sunday may, as formerly, be the *Sunday* which is nearest to the Feast of *St. Andrew*.

The

The Business thus ordered, all things will proceed in a like Method as they did, unless where Truth hath otherwise required, and where no Inconvenience can follow. Only, as to the Intercalar Days to be added every Leap Year, I would have it further noted, That in my Opinion they would be best placed in the End, as the last Days of the Years, wherein they are to be inserted; where they need not jumble others out of their places, or without necessity multiply the Dominical Letters.

The Years which receive these Additional Days will seem different from them in the ordinary course, but will in reality be the same. Which will happen, by reason the *Kalendar* for every Year will not retain in it (as formerly) any Remainder of the preceding Year, in which Remainder so retain'd the Intercalar Day was always placed. The present Year I write in is called the *Bissextil* Year, but the Supernumary Day was added in *February*, which, according to our Supputation, plainly belong'd to the Year before, although it give the Denomination of *Bissextil*, or Leap Year to this. But in the proposed Reformation every *Annual Kalendar* will have but its own Year, and then the Additional Day must be placed in the Year before that, which, in the ordinary *Julian* Course, would have been taken for *Bissextil*. Thus in the following *Kalendar* for the Year 1704, I have not inserted the Intercalar Day, but in the remaining part of 1703, where its proper place is; which therefore ought to be taken for the Leap Year, and so every Fourth Year after succeeding it in the Method proposed for Ever. And now,

4. To make it more manifestly appear how all will be, when the *Reformed Kalendar* shall be completed, to any Person that does not fully and clearly

ly apprehend it in the Description, I shall set forth an Exemplar thereof for the Year aforesaid, making my way to it through the remaining Part of 1703, that will not be contained in the *Julian Almanacks*; which also I shall so order, as to render it fit and prepared for what will be to follow, and that it may be, as far as the Nature of it will allow, agreeable thereto, without occasioning any Confusion or Inconsistence in the Succession of those Days which are on any account to be observed.

The Year which is to be described in the ordinary course will begin on the 1st of January, and will in reality be the same. Which will happen by reason the Almanack for every Year will not retain the same (as formerly) any Remains of the preceding Year, in which Remains to extend the Interstitial Day was always placed. The present Year I write is called the *Leap Year*, but the Superannuation was added in former Years, according to the Supposition, plainly belonging to the Year before, although the Reformation of the Calendar of Leap Years to this. But in the proposed Reformation every *Leap Year* will have but its own Year, and therefore Additional Days will be placed in the Year before that, which in the ordinary Year would have been taken for a Leap Year. Thus in the following Kalendar for the Year 1703, I have not inserted the Interstitial Day, but in the remaining part of 1703, where its proper place is; which therefore ought to be taken for the Leap Year, which every fourth Year after succeeding in the proposed plan for Ever. And thus

January

To make it more manifestly appear how all will be, when the Reformation is fully and clearly placed, to any Person that is naturally and clearly

January hath XXXI Days 1703.		
M.D.	W.D.	R.Sc.
1	a	Circumcision 12
2	b	13
3	c	14
4	d	15
5	e	16
6	f	Epiphany 17
7	g	Ox. & C. Term be. 18
8	a	Terms begins 19
9	b	Septuag. Conv. S P. 20
10	c	21
11	d	22
12	e	23
13	f	Hilary 24
14	g	25
15	a	26
16	b	Sexagesima 27
17	c	Purif. Virg. Mary 28
18	d	29
19	e	30
20	f	Octab. Hil. 31
21	g	Agnes Feb. 2
22	a	3
23	b	Quinquagesima 4
24	c	5
25	d	Shrove-Tuesday 6
26	e	Ash-Wednesday 7
27	f	Quind. Hil. 8
28	g	9
29	a	Terms ends 10
30	b	Quadrage. K.C.Mar. 11
31	c	12

February hath XXIX Days 1703.		
M.D.	W.D.	R.Sc.
1	d	12
2	e	Ember Week 13
3	f	14
4	g	15
5	a	16
6	b	2 Sunday in Lent 17
7	c	18
8	d	S. Mathias 19
9	e	20
10	f	21
11	g	22
12	a	23
13	b	3 S. in L. K.W. Pro. 24
14	c	Valentine. 25
15	d	26
16	e	27
17	f	28
18	g	29
19	a	Mar. 30
20	b	4 Sunday in Lent 1
21	c	2
22	d	3
23	e	4
24	f	5
25	g	6
26	a	7
27	b	8
28	c	5 Sunday in Lent 9
29	d	10
	e	12

Part of *March*, belonging to 1703.

M.D.	W.D.		R.Sc.
1	d	David	12
2	e		13
3	f		14
4	g	Ox. & C. Ter. ends	15
5	a	6 Sun. in Lent, or	16
6	b	Palm Sunday	17
7	c		18
8	d		19

Thus far our *Kalendar* for the Year 1703 ought to be supplied, before we begin a new one for the Year following. The *Sundays* and *Holy-Days* are here put in the Order as they ought to be, with relation to those which are to succeed: And *Ember-Week* is also in its proper Place. But the University Term will not for this once be reduced as it should, and therefore is

made to begin as soon as the *Holy-Days* would allow it; and to end in its proper place. That for the Law will too perhaps be irregular as to the first Day of Return; but so as, I hope, not to induce any intolerable Inconvenience.

Coming now to the *Kalendar* it self, the Reader needs only be acquainted, that as in the precedent Months there is a Column for the *Roman Stile*, so that in what follows there shall be one for the Old *Julian Stile* inserted in the beginning, as the other is at the end. And it may be enjoined so to be in all our Almanacks hereafter, so long as occasion shall require it, for manifesting the Correspondency of the Stiles, abating the strangeness of the Names, and lessening the Confusion upon any other Score.

Primen
or
March, } Hath XXXI
Days, 1704.

Imbris
or
April, } Hath XXX Days,
1704.

O.S.	M.D.	W.D.	R.Sc.
9	1	a	20
10	2	b	21
11	3	c	22
12	4	d	23
13	5	e	24
14	6	f	25
15	7	g	26
16	8	a	27
17	9	b	28
18	10	c	29
19	11	d	30
20	12	e	31
21	13	f	Ap.
22	14	g	2
23	15	a	3
24	16	b	4
25	17	c	5
26	18	d	6
27	19	e	7
28	20	f	8
29	21	g	9
30	22	a	10
31	23	b	11
Ap.	24	c	12
2	25	d	13
3	26	e	14
4	27	f	15
5	28	g	16
6	29	a	17
7	30	b	18
8	31	c	19

O.S.	M.D.	W.D.	R.Sc.
9	1	d	20
10	2	e	21
11	3	f	22
12	4	g	23
13	5	a	24
14	6	b	25
15	7	c	26
16	8	d	27
17	9	e	28
18	10	f	29
19	11	g	30
20	12	a	Ma
21	13	b	2
22	14	c	3
23	15	d	4
24	16	e	5
25	17	f	6
26	18	g	7
27	19	a	8
28	20	b	9
29	21	c	10
30	22	d	11
31	23	e	12
1	24	f	13
2	25	g	14
3	26	a	15
4	27	b	16
5	28	c	17
6	29	d	18
7	30	e	19
8	31	f	

Florenmen
or
May, } Hath XXXI
Days, 1704.

O.S.	M.D.	W.D.	R.S.
9	1	f	20
10	2	g	21
11	3	a	22
12	4	b	23
13	5	c	24
14	6	d	25
15	7	e	26
16	8	f	27
17	9	g	28
18	10	a	29
19	11	b	30
20	12	c	31
21	13	d	1 Jun
22	14	e	2
23	15	f	3
24	16	g	4
25	17	a	5
26	18	b	6
27	19	c	7
28	20	d	8
29	21	e	9
30	22	f	10
31	23	g	11
1 Jun	24	a	12
2	25	b	13
3	26	c	14
4	27	d	15
5	28	e	16
6	29	f	17
7	30	g	18
8	31	a	19

Alfol
or
June } Hath XXX Days,
1704.

O.S.	M.D.	W.D.	R.S.
9	1	b	20
10	2	c	21
11	3	d	22
12	4	e	23
13	5	f	24
14	6	g	25
15	7	a	26
16	8	b	27
17	9	c	28
18	10	d	29
19	11	e	30
20	12	f	1 Jul
21	13	g	2
22	14	a	3
23	15	b	4
24	16	c	5
25	17	d	6
26	18	e	7
27	19	f	8
28	20	g	9
29	21	a	10
30	22	b	11
31	23	c	12
1 Jul	24	d	13
2	25	e	14
3	26	f	15
4	27	g	16
5	28	a	17
6	29	b	18
7	30	c	19
8	31	d	20

Quintil
or
July } Hath XXXI
Days, 1704.

Frumen
or
August } Hath XXXI
Days, 1704.

O.S.	M.D.	W.D.	R.S.
9	1	p. Trin. S. James	20
10	2	e	21
11	3	f	22
12	4	a	23
13	5	b	24
14	6	c	25
15	7	d	26
16	8	e	27
17	9	f	28
18	10	a	29
19	11	b	30
20	12	c	31
21	13	d	1
22	14	e	2
23	15	f	3
24	16	a	4
25	17	b	5
26	18	c	6
27	19	d	7
28	20	e	8
29	21	f	9
30	22	a	10
31	23	b	11
Aug 24	24	c	12
25	25	d	13
26	26	e	14
27	27	f	15
28	28	a	16
29	29	b	17
30	30	c	18
31	31	d	19

O.S.	M.D.	W.D.	R.S.
9	1	a	20
10	2	b	21
11	3	c	22
12	4	d	23
13	5	e	24
14	6	f	25
15	7	a	26
16	8	b	27
17	9	c	28
18	10	d	29
19	11	e	30
20	12	f	31
21	13	a	1
22	14	b	2
23	15	c	3
24	16	d	4
25	17	e	5
26	18	f	6
27	19	a	7
28	20	b	8
29	21	c	9
30	22	d	10
31	23	e	11
Se 24	24	f	12
25	25	a	13
26	26	b	14
27	27	c	15
28	28	d	16
29	29	e	17
30	30	f	18
31	31	a	19

Equades } Hath XXX
or } Days, 1704.
September,

O.Sc.	M.D.	W.D.	R.Sc.
9	1	c	20
10	2	d	21
11	3	e	22
12	4	f	23
13	5	g	24
14	6	a	25
15	7	b	26
16	8	c	27
17	9	d	28
18	10	e	29
19	11	f	30
20	12	g	Oct.
21	13	a	1
22	14	b	2
23	15	c	3
24	16	d	4
25	17	e	5
26	18	f	6
27	19	g	7
28	20	a	8
29	21	b	9
30	22	c	10
Oct	23	d	11
1	24	e	12
2	25	f	13
3	26	g	14
4	27	a	15
5	28	b	16
6	29	c	17
7	30	d	18
8	31	e	19

Vinimen } Hath XXXI
or } Days, 1704.
October,

O.Sc.	M.D.	W.D.	R.Sc.
9	1	e	20
10	2	f	21
11	3	g	22
12	4	a	23
13	5	b	24
14	6	c	25
15	7	d	26
16	8	e	27
17	9	f	28
18	10	g	29
19	11	a	30
20	12	b	31
21	13	c	No
22	14	d	2
23	15	e	3
24	16	f	4
25	17	g	5
26	18	a	6
27	19	b	7
28	20	c	8
29	21	d	9
30	22	e	10
31	23	f	11
No	24	g	12
1	25	a	13
2	26	b	14
3	27	c	15
4	28	d	16
5	29	e	17
6	30	f	18
7	31	g	19

Advent
or
November } Hath XXX
Days, 1704.

O.S.	M.D.	W.D.	R.Sc.
9	1	a	20
10	2	b	21
11	3	c	22
12	4	d	23
13	5	e	24
14	6	f	25
15	7	g	26
16	8	a	27
17	9	b	28
18	10	c	29
19	11	d	30
20	12	e	De. 1
21	13	f	2
22	14	g	3
23	15	a	4
24	16	b	5
25	17	c	6
26	18	d	7
27	19	e	8
28	20	f	9
29	21	g	10
30	22	a	11
De. 23	23	b	12
24	24	c	13
3	25	d	14
4	26	e	15
5	27	f	16
6	28	g	17
7	29	a	18
8	30	b	19

Natale
or
December } Hath XXXI
Days, 1704.

O.S.	M.D.	W.D.	R.Sc.
9	1	c	20
10	2	d	21
11	3	e	22
12	4	f	23
13	5	g	24
14	6	a	25
15	7	b	26
16	8	c	27
17	9	d	28
18	10	e	29
19	11	f	30
20	12	g	31
21	13	a	Jan 1
22	14	b	2
23	15	c	3
24	16	d	4
25	17	e	5
26	18	f	6
27	19	g	7
28	20	a	8
29	21	b	9
30	22	c	10
31	23	d	11
Jan 24	24	e	12
25	25	f	13
3	26	g	14
4	27	a	15
5	28	b	16
6	29	c	17
7	30	d	18
8	31	e	19

Undemen
or
January } Hath XXXI
Days, 1704.

O.S.	M.D.	W.D.	R.S.
9	1	f	20
10	2	a	21
11	3	a	22
12	4	b	23
13	5	c	24
14	6	d	25
15	7	e	26
16	8	f	27
17	9	g	28
18	10	a	29
19	11	b	30
20	12	c	31
21	13	d	2
22	14	e	3
23	15	f	4
24	16	g	5
25	17	a	6
26	18	b	7
27	19	c	8
28	20	d	9
29	21	e	10
30	22	f	11
31	23	g	12
	24	a	13
	25	b	14
	26	c	15
	27	d	16
	28	e	17
	29	f	18
	30	g	19
	31	a	20

Menult
or
February } Hath XXVIII
Days, 1704.

O.S.	M.D.	W.D.	R.S.
9	1	d	20
10	2	e	21
11	3	f	22
12	4	g	23
13	5	a	24
14	6	b	25
15	7	c	26
16	8	d	27
17	9	e	28
18	10	f	29
19	11	g	30
20	12	a	31
21	13	b	2
22	14	c	3
23	15	d	4
24	16	e	5
25	17	f	6
26	18	g	7
27	19	a	8
28	20	b	9
29	21	c	10
30	22	d	11
31	23	e	12
	24	f	13
	25	g	14
	26	a	15
	27	b	16
	28	c	17
	29	d	18
	30	e	19

The Day to be added next
Leap Year may here be plac'd,
as is propos'd before.

Note, Those Days that having no Observation in our Church are here inserted, were put in only for the distinction they make of their respective Times and Seasons, usefully perhaps to some Persons; for which cause also they keep their Stations without any Reduction, and others may be added.

Here, Reader, I have given you a full, and so far as I yet see, a Complete *Kalendar* for the Year 1704; which is neither Redundant on one hand, nor Deficient on the other; neither taking in any part of the Year 1703, nor leaving any out for the Year 1705; and wherein nothing greatly requisite for a Yearly *Kalendar* (setting aside the Planets Motions, and Configurations) is omitted. I have laid it down at large, that what before I was describing may be the more fully comprehended. For the laying an Example of any thing described before our Eyes, gives Life to the Description, making it more plain, and better understood. If it hath had that Effect in this Instance, there will need the less Persuasion, to take off Peoples Prejudices against the imagined Difficulties and Perplexities they feared would ensue. On the contrary, many, it's probable, when they have attentively consider'd it as it lies now before them, will deem this Reformation facile, and very practicable: And, I am perswaded also, very regular and convenient; the Year beginning with the Sun's Course in the Ecliptick, as well as at the Commencement of our Christian *Epocha*; the Seasons orderly divided by the most noted Festivals, almost to a Day; each Day and Time allotted its proper Station; the whole made obvious and intelligible to an ordinary Capacity; and the corresponding Agreement of the Stiles one with another so plain and manifest, that a Letter wrote to one using another Account

count may be dated in his own way. If the New Names please not, they are no part of what I contend for, these may be used, or others better fancied, indifferently to me. To reduce our manner of Computation to a more regular Order, and nearer Conformity with the original Commencement of our Christian *Epocha*, with the least Variation, Ambiguity, or Disorder, is all my design; unless it be moreover to bring the Moveable Feasts, which have formerly occasion'd many needless and unseasonable Disputings, as near to a Fixation as was possible, whereby the intricate Rules, and many Falsities of the never-well adjusted Paschal Tables, Epact, Golden Numbers, &c. might be avoided; as in this Method they may, without any Contradiction to the Design, at least of the forementioned Council, and I am sure with the nearest Congruity possible with our Solar Reckoning. Indeed, all further use of Tables, for the new Calculating any necessary part of our *Kalendar* in its future Annual Progress, will be superceded, if what we should do next may to exactness be accomplished. Which is,

Lastly, To find out a just Allowance of Time, wherein to omit the Intercalar, or Additional Day in Leap Year, for the keeping its over-portion from over measuring the *Sun's* Circuits in its Annual Revolutions; that whenever the Excess comes to a Day, it may be taken off, and the Year so kept continually as it is, the *Sun* returning to the same Points in the Ecliptick always on the same Days. To assign a just and exact Number of Years for this Allowance, will not, so far as I can see from what hath hitherto been done, be very easie: for I must own my self yet unsatisfied with what hath been propos'd for this purpose. The Allowance made by the Church of *Rome* appears no way consonant to Truth; and to that of
Mr.

Mr. *Lidgate*, approved by the Author of the *Julian* and *Gregorian* Year, although much more probable, I must crave that Author's leave to suspend my assent. How he hath proved it I must own I have not seen; how far his Arguments conclude, or wherein they are questionable, I ought to leave to the Judgment of those who have, and should wholly have confided in the aforesaid Authors, but for some Reasons, which will appear anon for my Exception against both. And in the mean while I do profess my self doubtful, whether we have yet a sufficient Foundation, whereupon to ground any certain and unerring Allowance. Should we chuse to build it upon a Calculation from our present Tables, besides all Objections against the Truth of the most Exact that are yet extant, we shall not find any two of them to agree. And the late visible Eclipse of the *Sun* last Year, in respect of its Time, sufficiently evinces that they sometimes Err for several Minutes; and 'twill be easie to demonstrate, how much one Minutes Error in the Calculation for one Year will produce when protracted for a great many, there needing no more to be added every Year, for the Error to occasion in 1440 the mistake of a whole Day. If on the other side we look back upon former Ages, and by comparing the several times the *Aequinox* hath been in them observed to happen, and measuring the Distances wherein the several Proportions of Retrocession have from time to time been made, think to collect a certain Allowance for its Retrocession of a Day hereafter, we should find too much Difference, Inconsistence and Uncertainty, to be positive in any thing. Had we indeed a sufficient number of such Observations, of a reasonable distance of Time from each other (the further the better) concerning whose Truth we were well assured, I should think it no harder to establish from them a certain Allowance, than

than it hath been to frame Tables for Calculation; and it would be in my Judgment the most eligible way. Two or three there are, which being generally acknowledged, by examining a little what consistence the two aforementioned Allowances have with them, and trying what congruity they may have with any other, we may gather how far each of them may deserve our Approbation.

There will be a Consistence between the Allowances and the Observations, if the former be found so many times in the number of Years expired since the latter, as there are Days the *Equinox* hath in that while fallen back in the *Kalendar*; each Day requiring a whole Allowance for its entire Retrocession. Or at least the Deficiency or Excess, after the Multiplication of the one by the other, should not be more than will consist with its being on that Day, where the Observation hath placed it. And we must note, the Deficiency or Excess will then be too much, when the time, which ought to be retroceded in such a proportion of the Allowance, being added to, or taken from the time of Day where you now find the *Equinox*, will remove time for its falling upon the Day of the Observation too far backwards or forwards for its being brought within the compass of that Day. For if the Allowance be true, the finding it so many times entire in any number of Years, as there are Days retroceded in the lapsing of those Years, shews the *Equinox* to have been on the same time of day in the first of those Years, as it is in the last; each entire Allowance making an entire Day of Retrocession, neither more nor less. And therefore what Excess there is after the Multiplication of it, denotes the number of Years contained in the *Overplus* to be yet wanting of making the last Day's entire Retrocession: So that whatever quantity of
Time

Time is proportioned to that part of the Allowance, it is yet to be Retroceded, before the *Æquinox* be brought to the same time of Day, where it was in the time of the Observation. For the same reason, if there prove a Deficiency, and the number of Years made by the multiplied Allowance fall short of the Years expired during the Retrocession, it signifies the number of Days retroceded to have been compleated so many Years ago as are contained in the Deficiency; so that there hath been a further Retrocession since then, and consequently the *Æquinox* so much later in the time of the Observation than it is found now, as in the former Case it was so much sooner. This being noted, we shall now enter into the Examination.

It is generally admitted, that the *Sun* came to the *Æquinoctial* upon the 25th of *March* in the Year of our Lord's Incarnation, and that the *Æquinox* was placed on that Day by *Sosigenes*, when about Forty-four Years before he help'd to compose the *Julian Kalendar*. With this the two mentioned Allowances have no manner of Consistence. The Time elapsed since our Lord's Incarnation is 1700 Years, in which while the *Æquinox* hath retroceded sixteen Days, being now found, according to all our Calculators, on the 9th of the same Month near Noon. And if by 16 we multiply the *Roman* Allowance of $133\frac{1}{2}$, it makes $2133\frac{1}{2}$, wherein is an Excess above the Time elapsed of $433\frac{1}{2}$, which is more than that Allowance comes to for the Retrocession of 3 Days; so that either the *Æquinox* at our Lord's Incarnation was not on the 25th, but on the 22th of *March*, or else it is not yet come back to the 9th, nor will to the same time of day, according to this Allowance, this 433 Years. If we thus multiply 120 (Mr. *Lidgate's* Allowance) the result will be 1920, carrying an Excess of 220, which is as much almost as twice the Allowance, and
confe-

consequently disagrees so much, *i. e.* almost two Days with the granted Observation. Nor, if we brought the Trial further to the Time of *Sosigenes*, would there any Agreement appear, the difference of that which least disagrees being about a Day and half, or, the *Æquinox* being now about Noon, as good as two Days. Let us see whether we can assign any other Allowance that will better agree.

The famous *Copernicus* judged the Annual Circuit to be performed in 365 Days and 6 Hours wanting 115th part of a Day. With him agree also those assiduous Observers of the Celestial Motions the *Persians*, according to which Proportion *Messalah* and *Albumasar* framed their Tables of the *Sun's* mean Motion; whereby 115 should be the Allowance. This indeed comes nearer than the former; but the largest Number for an Allowance, that will consist with the *Æquinox's* being as in the Observations here to be considered, is 111; even supposing that Calculation to be the truest, that places the *Æquinox* this Year the latest, *i. e.* about 2^h 36^m *P. M.* Had it been a Number consisting of even *Bissextils*, it had been more to be desired; but none such either below or above this Number will be found to agree. If we take 108, it puts the *Æquinox* at the first *Nicene* Council *March 22th, P. M.* if we pitch upon 112, that brings it at the Incarnation of our Lord to *March 24th*. However, odd as it is, the omission of the Intercalar Day, according to it, may be ordered more suitably than is done in respect of the more odd Number in the *Gregorian* Account. It's true, this Omission cannot be every last Year of the Allowance, because that will not be always Leap Year; but it may be so appointed sometimes before and sometimes after, as taking one time with another the

the Days omitted may come to the same Number in process of time, as if one had been omitted at the termination of every Allowance. The omission may be first at 108th, and then thrice at the 112th Year; and so once at the 108th, and thrice at 112th to the end of Time: Whereby four Omissions will be made in every 444, *i. e.* in four times 111 Years, without departing above three Years at any time from the Allowance; whereas in the Church of *Rome* one Omission is at above Thirty-three Years distance, another at above Sixty-six, and a third at a Hundred from the true ending of the time of their Allowance, and thence they must continue under (in effect) a Day's mistake, until another Century be past to make all even.

We will now see how this Number will agree with the aforementioned Observations. Multiplying it by 16 gives 1776, which, in respect to the Years past since our Lord's Incarnation, bears an *Overplus* of 76 Years, giving in time of Retrocession proportionate about 16° 26' (for if 111 Years give 24 hours Retrocession, 76 will give about 16° 26') Whereby is shewed, that the *Equinox* wants now 16^h 26' yet to be Retroceded, for the bringing it to the exact time where it was at our Saviour's Incarnation; *i. e.* that it was then, not 2^h 36' *P. M.* as it is now, but 16° 26' sooner, which will bring it into *March* the 24th 10^h 10' *P. M.* but by adding 3^h 4' for the more Easterly Longitude of *Judea*, will put it there on *March* 25th about 14' after one of the Clock in the Morning. This is as early in the Civil way of accounting a Day as it may well be admitted, and one Year more in the Allowance would reduce it into the 24th even in that Longitude. That we ought to take the Day in the Civil way of reckoning it, will appear manifest from any probable Allowance, and

Animadv. in
Epiph. ad Hz.
ref. 51 Al. p.
174. Edit. Col.

is according to the Opinion of the Learned *Dionysius Patavinus*, who speaking of this *Æquinox*, says, *Quod Christi saculo 25to Martii πωλινικῆς quadrabat.*

If we proceed further to the Time lapsed since *Sofigenes*, we find, after the Multiplication as aforesaid, that there will be an Excess above that time of about 32 Years, which shew, by proportioning as before, 6^h and about 55' wanting of being yet Retroceded to the time of Day, where it was at the time of his Observation; i. e. that it was in the Longitude of *Rome*, for which his *Kalendar* was Calculated, about 8' 41' *mane*, whither it will arrive Thirty-two Years hence; so that hitherto we have met with consistence enough.

But some may say, I have adjusted this last account to the Forty-fourth Year before Christ, whereas it ought to have been to the Forty-fifth, our Saviour being according to the common Opinion born in the Forty-fifth *Julian* Year. To which I reply, That *Epiphanius* doth constantly affirm his Birth to have been in the Year when *Augustus* the thirteenth time, and *M. Plantius Silvanus* were Consuls, which was the Forty-fourth *Julian* Year. Whether this were really so, I refer my Reader to the Consideration of the

Anim. ad Pz.
ref. 51. Alog.
p. 98, &c.
Edit. Col.
Lib. 4. De E.
mend. Temp.

several Opinions and Arguments recited by *Dion. Pctavinus* upon this Head. For the greater ease in our Comparison between two *Bissextils* I have presumed it as I have done: Or, if with *Scaliger* we may say, the first *Julian* Year was in place of *Bissextil*, and that in the regular Course the 5th, 9th, 13th, &c, are to be taken for such, this will make the Year of our Lord's Nativity indeed the 45th, yet both that and the first *Julian* Year *Bissextils*, which is all I am concerned for; for

for so that we may take the Year of *Sosigenes's* Observation as *Bissextil*, it will not make above 13' difference in the falling out of the Vernal *Æquinox*, altho' another Year be cast in. I go on to

Another, which passeth for an unquestion'd Observation, that in the Year 1582, when the *Gregorian* Account was instituted, the Vernal *Æquinox* was taken to be *March 11*. whereas in the Year 1698 (a Year at the same distance from a *Bissextil*, which in this way of Examination we ought always to take care of) it was by the *Caroline* Tables *March 10*. about Two of the Clock in the Morning. There is so small a distance between these Times, that scarce any Allowance, unless the *Roman*, will so soon disagree. Here appears one Day retroceded in 116 Years: Once 111 wants 5 Years thereof. shewing about 1 5' to be Retroceded in that while more than a Day, so that the *Æquinox* being about Two a Clock in the Morning the last Year, it must have been about 3 5' in the first here, or at *Rome*, for which place this Observation was made, an hour later, our third being their fourth Hour. Mr. *Lidgate's* Allowance exceeds the Time elapsed 4 Years, i. e. a whole *Bissextil*, giving 48 yet to be Retroceded to compleat an entire Day, and shewing it therefore to have been at first so much earlier. Both these consist very well. Once the *Roman* Allowance carries an Excess of 17 Years and $\frac{1}{2}$, giving in time proportionate $3^h 7' 12''$, which being yet to be Retroceded brings us in the Year of the Observance to *March 10th*, $10^h 52' 48''$ P. M. here, and at *Rome* $11^h 52' 48''$; i. e. the Day before the Observation. So that by it the *Æquinox* was on the same Day in the Year 1698 whereon it was in the former, and no Retrocession of a Day could properly be affirmed. It will prove the *Roman* Regulators to have been mistaken then in placing it on the

11th; and seems rather to justify the Noble *Tycho Brahe*, who at the same distance after the next *Bissextil*, whereat this was in respect of the preceding;

i. e. 1586, observed it to be *March* the 10th, 9 hours 8 minutes *P. M.* as the Learned * *Scaliger* hath informed us.

We shall put down for the last generally acknowledged Observation, and which lies between the rest, that, at the Sitting of the First Council of *Nice* in the Year 325, the *Equinox* was founded by the Bishop of *Alexandria* to be on *March* 21; 1372 Years after, *viz.* in the Year 1697 (at the same distance from a *Bissextil*) it was Calculated to be on the 9th of the same Month about 9 hours *P. M.* The further the Observation we compare it with is distant, the more we discover the *Roman* Allowance to disagree; a plain indication of its Falsity. Its Multiplication as above produces an *Overplus* here of 228, as much almost as will make two Days, bringing the *Equinox* at the time of the Council to *March* 20th, 43' 24" after 7 in the Morning at *Alexandria*, the Place of the Bishop's Residence, or a little after 5 here. Mr. *Lidgate's* Allowance suits here very well, producing after Multiplication an Excess of no more than 68, which, in respect of the time of the Vernal Ingress's being made 1697, will place it in the Year 325, *March* 21th, 36' after 8 in the Morning here, and at *Alexandria* 16' after 11; which is near enough to justify both the Observation, and the Consistence of this Allowance. The other of 111, after an Operation as before, comes 40 Years short, which puts us to look for the aforesaid Ingress, in the Year of the Observation, *March* 21th, 17' 39" *P. M.* in this Longitude, and in that of *Alexandria* 20^h 19' *P. M.* whereby, in the Civil way of reckoning a Day, it comes into the Morning of *March* 22th. But this, I pre-
sume

sume, may easily be accounted for, when we consider the Observator was a great Astronomer, and in all probability reckon'd the Days in the Astronomical Method, which counts from Noon one day to Noon the next; so that what in the civil Sense is the Morning of the 22th Day, in the Astronomical is the latter half of the 21th. Which (I think reasonable) Supposition being granted, will bring the Truth of this last Allowance to a very near Consistence also, with the Retrocession made in the Interval between our Lord's Incarnation, and the Sitting of this Council. For thus it being brought to the 22th the last Year in the Civil Account, according to which it was on the 25th in the first, there are found 3 Days retroceded in the 325 Years, and thrice 111 makes 333, wherein there is an *Overplus* of but 8 Years, giving of Retrocession when proportioned no more than one hour 44', that it fell later in the last Day than it did on the first. Which, when we have allowed for the 5' and about 47' advance, it made in the last Years removal a Year further from a *Bissextil*, will put us on the time found, upon comparing this Allowance with the first Observation, as before, varying only 2' by reason of some inconsiderable Fractions, not before allow'd for.

And truly without the aforesaid Concession, it will be impossible to reconcile these two Observations, however generally they be acknowledged, with any regard to the rest, by any Allowance whatsoever. For by what Allowance shall we say, there could be four Days Retrocession of the *Aequinox* in 325 Years? as if both Days were reckoned alike there would be. It will agree with none yet proposed that I know of, nor can with any, that will consent too to the Time that hath been Calculated for it since; or even that, where it was held to be in 1582. For although the

Regulation then made was designed to be governed by the Time they then observed it in, and one would think they could scarce have missed to make their Allowance to agree with it, yet it is not unlikely but they were misguided, by their pitching upon a Year that was a Year further from a *Bissextil*, than that they were to compare it with. The almost six Hours the *Sun* came later to the *Aequinox* that Year, than it did the Year before, did occasion a whole Day's mistake in the Comparison, if the *Aequinox* was then so early in the morning, as that the Deduction of the almost six Hours would bring it from the 11th to fall into the 10th the Year before, wherewith the Comparison ought to have been made: As was the case, if we'll grant either *Tycho Brahe's* Observations soon after, or their own Allowance to be true. And then, instead of Ten Days they should have cut off Eleven (and, if the before-mentioned Concession be made, as I see not how it can be denied, Twelve) to bring it truly to the Time they aim'd at, and proportion'd their Allowance accordingly. For want of which, it may be, it is that, notwithstanding their Omission this Year of an Intercalar Day, within a less compass of Time than their full Allowance, the *Aequinox* is slipt from their Twenty-first Day, where they thought to keep it, and found in the Day preceding. And why might it not be through a Carelessness in keeping to the same distance from a *Bissextil* in Comparisons of this nature, that some have complain'd of the Uncertainty they meet with in tracing out the true Measure of the Year? But to return;

How far what I have said may cause the Allowance of 111 to look probable, I have no confidence to assert. To make the Credit of it, or any other Indisputable, will, I rather think, require further Observations;

servations; and that in a stricter Sense than in some places before I have meant them. Were the Observations that are handed to us from our Fore-Fathers enough and unquestionable; or among those we have could we nicely distinguish which ought to be heeded, and which not, the Service they would do us in discovering a certain Allowance I should prefer before what could be wrought from any Tables. But the difference, whether of Instruments, or Tables made use of in what I have here called Observations; the difference of Meridians, which occasions a difference in Time in the several Places where these have been taken; the several Methods for reckoning of Days, their beginning and ending; together with the Inconsistence of some Observations with others, and that sometimes of the same Authors, neither agreeing with themselves, or others in any certain Allowance, makes it very much to be wished, that some further and more nice Remarks and Observations were made. It would do well therefore if some Observatories were erected, and skilful Mathematicians appointed, to Remark every Year the exact Time of the *Sun's* coming to the *Æquinoctial* Points. And for the better doing hereof, we may consider, whether we ought not to desire the Concurrence and Assistance of our Fellow Protestants on the Continent, where, the Sky being generally more clear and serene, they will be in a greater Capacity of accomplishing it to satisfaction. Or if our Agents might be permitted to do it in *Persia*, or some more Southern Parts, we should expect it to be done to a yet greater Perfection. Whereby, before, in all likelihood, there will be occasion for the Omission of an Intercalar Day, will be found after the comparing of one time with another, and proportioning the several Retroceded Distances, if not an exact just Allowance

Allowance, yet one so near it as will be sufficient to keep our *Kalendar* right for a longer Time, than perhaps the World shall last.

The use of an Allowance, when resolv'd on, is by what hath been said before sufficiently intelligible; nor need I spend more words, either to Direct or Explain it. Only we ought to Note, that, whatever the Allowance is, if by the Multiplication of it as before there prove to be some Years yet to come for completing the last Days Retrocession, it may be appointed, that the next Omission of an Intercalar Day shall not be, before that Number of Years, together with the whole Allowance, be Expired. As if 76 Years be required to make up the Retrocession of 16 Entire Days since our Lords Incarnation (which there is by the Allowance of 111) the next Omission of an Intercalar Day may not be before the Year 1887 (which will, this Reformation being made, become Leap Year); after which every 108th and 112th (as before) if this Allowance be approved, it ought to be Omitted. By which means a longer Time will be gain'd for perfecting our Observations; and if in this while we are not satisfied, an Allowance, which shall then appear most Probable, may be Established, with a Proviso for its Alteration, when a Better Discovery shall be made.

Having done with the main Particulars I undertook for this Reformation, I am further now to Engage with some Objections, that have been made against the Altering of our *Kalendar*, and which some may think of force against any Reformation of it. These I shall but briefly consider; for that I believe they will not be much insisted on, if I have been so Happy as in any measure to have taken off here the dread of unknown Difficulties in the Undertaking.

It is acknowledged as to most of them, that they have been principally designed against our Changing for the Roman Stile. Yet since all Men have not that Discretion we could wish them, and some may urge them further than was at first meant, if they afford any glimps of a Colour for that purpose, to prevent the Mistake of any one so inclined, it can do no hurt to allow them here some mention: Such as think them of no Moment may freely pass them over to what they shall judge more Material.

1. As to what Danger there is of Pleasing *Rome*, or Displeasing the Dissenters by Changing for the *Gregorian* Account, the Fear of it is wholly taken off by this Regulation; which differs more from the *Gregorian* than the *Old Kalendar*. Whence instead of giving Occasion for new Differences, by making a further Distinction of us from the Romanists, it may possibly be a Means of better Uniting, and so giving Strength to the Protestant Interest. No one who looks abroad into the World, and sees what Necessity there is now for it, will think any fair Means, that may contribute any thing thereto, unworthy our Regard. And if the Alteration proposed may in any sort be Instrumental to the Promotion of so great a Good, what good Man will be against it? The Author of the *Julian* and *Gregorian* Year grants an Alteration allowable, where our Church may get some considerable Advantage by the Change. Which we shall also further gain, by having this better Ground to stand upon in our Disputes with the Romanists on this point; which had the Protestants in the *Palatinate* had last Year, it might have been much question'd, whether they would so easily have yielded to their Enemies Compliance. One Error that is more apparent may sometimes be baffled by another that is less

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so ; but when once the Truth is cleared, it presently strikes an awe into the Opponents, and makes them willing to withdraw from the Contention ; perhaps wins a Submission, or, if not, leaves no Excuse for the Opponent's Obstinacy. And if the Truth be not absolutely attained to in all points by this Regulation, yet our much nearer approach to it, than by either of the other Accounts, will I perswade my self be very manifest to all, who will but compare and consider them : indeed so manifest, that there will appear little left to say in a Dispute for those against it ; whose Falsities are so Notorious, and their Conformity partly with the Old Heathenish, and partly with the *Jewish* Reckonings is so palpable, that it hath been some wonder to me, how they could pass through so many Learned Christian hands without an Earlier Correction.

If it be urged 2^{ly}, that what so long hath obtain'd ought not lightly, and without great and pressing Occasion be altered ; and as to the *Julian* Account, all the Eastern, and many of the Western Churches are, and have been long in a continued Possession of it. This, altho' it may be meant against Embracing the Roman Stile, hath the same force against a Change for any other. And it would seem to have some Validity, were the Error of no ill Consequence, or were we not put to Defend it against those, who are forward to take all Advantages to Expose us. It is true, what they oppose against it is not Exact ; but it is nearer being so, than what we would keep ; which gives us in the Contention the worst End of the Staff. And this I see no Reason for, so long as having left them both, we may find another, which will be more conformable to Truth. This will, if not Silence and Convince the Adverse Party, yet render them less forward to enter the Lists upon a Disadvantage ; and
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be no more than what we may presume would have been taken up at first, had it been then as well understood. The Christians, who first took up with the *Julian* Account, were but lately called, some from among the Heathens, and some from among the *Jews*, and therefore no Marvel was it, that in their Account they retained something of both, being induced thereto from their first imbibed prejudices. And had they been willing, there were not many of them able to find a better; and if any were, yet being Subject to the Government of their Enemies, as the Eastern Churches also now generally are, they had no means of bringing it to any Establishment. As to the first Synod of *Nice* who first breath'd in Liberty under a Christian Emperor, wherein something relating hereunto was Debated, they shew'd such a want of Able Astronomers to canvass it thoroughly, that they obliged themselves to one Single Man, viz. the Patriarch of *Alexandria*, for receiving Notice of the Time when they should keep their *Easter*; which, were such an Order still to continue, they would do well to consider the consequence of, who would awe us with that Council. But the Objection from thence I have considered before. Then as to those of the Western Church, who using still the *Julian* Account may be Offended at our leaving it for another, I humbly offer, whether it might not somewhat Strengthen our joint Interest against the Common Enemy, to Desire (as was mentioned before) their Concurrence; which in so Reasonable a Thing, not at all relating to any Article of Faith in Dispute, but rather tending to a Cementing of us into a Further and Stricter Union, I scarce think they will deny, whenever it shall be thought a fit Season to recommend it.

3. We are told, that the altering of the Ancient Roman Account for the present *Julian*, caused the

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First Year of its Institution to be afterwards called by Learned Men *Annus Confusionis*; that the altering this for the *Gregorian* introduced also some Perplexities, whence is insinuated, that in another Alteration we may Expect the like. But this is in a great measure, if not fully prevented, by the Addition of those Two Columns which are placed first and last in each Month of the New *Kalendar*, to shew what Day and Month in the Two former Accounts each Day and Month in the New is answerable to. And this may be ordered to continue, as long as those Accounts shall be in Use with any of our Neighbouring States or Kingdoms for Ever. 'Tis true some Difficulties may happen in ascertaining and ordering justly the Times, on which several things are Limited, and to be Performed, from the Direction and Appointment of former Writings, Grants, Acts, and Covenants, in the Management of our Civil Business. But they may easily be remedied by Enacting, that all such Times and Determinations of Time mentioned in former Writings, Acts &c. shall be understood and taken for such Times and Determinations of Time, as they shall be found corresponding to, upon a due Comparison with and adjustment of the Old English Stile to the New, in the manner and according to the Method Observed in the Preceding *Kalendar*; or according to what other Rule the Wisdom of our Parliament shall prescribe, without whose Authority I am not so vain as to expect any thing to be done. For Instance, If my Lease is to Determin, or I am to Pay a Sum of Money on *Michaelmas* Day, upon an Enquiry, as before Directed, I look out *September* 29th according to the Old or *Julian* Stile, and over against it I find *Equades* 21st according to the New, which will be the Time for the Determination of my Lease, or Payment of my Money appointed: And thus

thus *Lammas*, or the First of *August* in the Old, will be the 24th of *Quintil* in the New Stile ; for which Days the former mentioned are to be taken, and so to be understood for Ever. I see no other Confusion worth our Dreading, or which may not with less Trouble be easily avoided.

If *4/y*, what is said of the *Julian* Accounts keeping a Medium between the Syderial and Tropical Periods be expected here to be answered, It will be enough I conceive to say, that, unless our Year were measured, and to be bounded by a Syderial Period, the suitableness of our *Kalendar* thereto need not here to be brought into the Question. Experience hath enough Taught us the Inconstancy of such Periods, and that were our Seasons to be determined by them, they would in a while be so Transposed, that the one would be put for the other ; Spring would come into the Place of Winter, and that by Degrees be brought into the Room of Summer. And as for what Help the Old Account may give in Calculation, the main End this Objection seems to have been urged for, who will doubt but that there may be Tables made to supply that as well in another away ? Or were it otherwise, when our Regulation shall be perfected, the Convenience will be so great, and the need of New Calculations in respect of any Necessary part of our *Kalendar* so little, that a small trouble upon that score should be no sufficient Reason to Obstruct it.

Lastly, should any one Object, that to find out an Exact Measure of the Year for the gaining of a just Allowance, hath been always found by Learned Men so Difficult a Task, that it would argue us to be very Vain, did we now think to accomplish it. Such an Objection as this would have Equal Force against all Great Undertakings, and were it to be heeded would Discourage the attempting any thing that is Noble,
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any thing that is not Ordinary and Easy. I am indeed far from Flattering my self with the thoughts of having done any thing Extraordinary towards clearing that Dark point, or of having performed more than a mean Offer at that, which others perhaps may hereby be provoked to Enquire more Narrowly into; yet if we are Right in what most Believe concerning the Day of our Lords Incarnation, and the time of the Vernal *Æquinox* that Year, we need not be ashamed of recommending the *Kalendar* as is here set forth to be Established. Whatever comes of the Allowance, so far we are sure to be Right; we have shewed it Easy, and render'd it Convenient: if this be but granted us, in what belongs to the Allowance we shall willingly Submit to a *Melius Inquirendum*; and to make Enquiry herein can do no hurt, if it produce no good. Or whatever Judgment pass upon the Performance in General; it cannot be denied but that the *Kalendar* will in several respects be much better than it is; and that if the Allowance cannot be made Exact, One may be found that will keep us much nearer to Truth than we are now; yea so near, that we shall be Subject to no Sensible Error for some Thousands of Years. And we cannot but think, with the Poet, *Est aliquid prodire Tenus, si non datur Ultra*. It will be something to go as far as we can; and to do so, will I am perswaded sufficiently compensate for all the Trouble we shall be at; and produce a Change, if not the best, yet much for the better, and such as may be wish'd for by all Understanding Men.

I can at present Recollect no further Objections, that deserve any other Answer than what the Objectors own thoughts may readily suggest; unless any be Obstinately bent to raise a Dust to blind his own and others Eyes, for fear they should see a Truth, that
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some Interest, or perverse Humor makes him Unwilling to have Believed.

If any no better Natured should snarle at what I have been here Endeavouring, and it proves that he shews his Teeth where he can also Bite, at least I shall have this Comfort, that my Design was good, whatever becomes of my Performance. I know there's Matter enough for ill Nature to work upon; those that look for Elegant Stile, quaint Expressions, fine Thoughts, or Subtle Speculations, may find here a Copious Subject to play upon: here's no Surprizing Turns, Entertaining Fancies, or Sparkling Wit; no sharp Invectives, Biting Sarcasms, or pungent Satyr; all appears Dry and Insipid, Flat and Heavy, nothing to relish with a Delicate Palate, or entertain a Nice and curious Fancy. There was not any thing of this Nature in my aim; nor will consequently any Censure thereupon be my regret. If I have contributed ought towards removing the Difficulties, which were conceived would be found in this Work, by the Draught I have here Exposed of it, I am satisfied; and, if that procure the Desired Reformation, should be fully pleased. I have done my Endeavour to bring here the Substance of what to this End may be spoken; the manner of speaking it I'll grant may be mended, and should have been glad a more Able Pen would have undertaken it. The Faultiness of our *Kalendar* exposed us to some Inconveniences, and gave I thought some Advantage to our Enemies; so that willing I was to say somewhat, if it were but to incite others to say more. And might I have some Favour in the Expression and Stile, I should perhaps Flatter my self, in respect to the *Kalendar* part, with the having here at large set forth a completely Reform'd One in all its parts, with every thing that hath any Material Relation to it; so that there needs little more, besides
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the Suffrage of our Legislators (and it may be some small alterations, and improvements) to give it an Establishment. But to others Thoughts it's here submitted; with Hopes, now it's put to the Test, the Corrections of Abler Workmen will Refine it. And if some should prove so cross, as to try to make it appear all a Blunder, it is not impossible, that should I have leisure, or be Able to make no Reply my self, yet some will be moved to try what their Greater Skill can do, until at length the Point be, thoroughly canvass'd, the Business cleared, and the Faults, which are now to every one Visible, at last Reformed.



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